

ABSTRACT OF THE DISCLOSURE

An Si/SiGe layer including an Si buffer layer, an SiGe spacer layer, a graded SiGe layer and an Si cap layer is epitaxially grown in a region corresponding to a collector opening while a polycrystalline layer is deposited on the upper surface of a nitride film, and side surfaces of an oxide film and the nitride film. In this case, the Si buffer layer is formed first and then other layers such as the SiGe spacer layer are formed, thereby ensuring non-selective epitaxial growth. Then, a polycrystalline layer is deposited over the nitride film.